

## CLAIMS

- 5 1. A process for modifying an information bearing signal, said information comprising at least in part program content, comprising the step of:
- 10 a. encoding into at least one portion of said information bearing signal unused for program content of a first segment of said information bearing signal, supplemental information intended to be utilized in association with, but not before the presentation of, a second segment of said information bearing signal.
- 15 2. A process as in claim 1 wherein said supplemental information comprises three-dimensional information.
- 20 3. A process as in claim 1 wherein said supplemental information comprises image area map information.
- 25 4. A process as in claim 1 wherein said supplemental information comprises interactive information.
- 30 5. A process as in claim 1 wherein said supplemental information comprises hypermedia information.
- 35 6. A process as in claim 1 wherein said supplemental information comprises other than from the group comprising three-dimensional information, image area map information, interactive information and hypermedia information.
7. A process as in claim 1 wherein said first segment and said second segment are one and the same.
8. A process as in claim 2 wherein said first segment and said second segment are one and the same.
9. A process as in claim 3 wherein said first segment and said second segment are one and the same.

10. A process as in claim 4 wherein said first segment and said second segment are one and the same.

11. A process as in claim 5 wherein said first segment and said second segment are one and the same.

12. A process as in claim 6 wherein said first segment and said second segment are one and the same.

13. A process as in claim 1 wherein said first segment and said second segment are distinct, and said second segment is subsequent to said first segment.

14. A process as in claim 2 wherein said first segment and said second segment are distinct, and said second segment is subsequent to said first segment.

15. A process as in claim 3 wherein said first segment and said second segment are distinct, and said second segment is subsequent to said first segment.

16. A process as in claim 4 wherein said first segment and said second segment are distinct, and said second segment is subsequent to said first segment.

17. A process as in claim 5 wherein said first segment and said second segment are distinct, and said second segment is subsequent to said first segment.

18. A process as in claim 6 wherein said first segment and said second segment are distinct, and said second segment is subsequent to said first segment.

19. A process for modifying an information bearing signal, said information comprising at least in part program content, comprising the steps of:

- a. encoding into at least one portion of said information bearing signal unused for program content of a first segment of said information bearing signal, supplemental information intended associated with a second, distinct, subsequent segment of said information bearing signal; and,
- b. utilizing said supplemental information in association with said second, distinct, subsequent segment.

20. A process as in claim 19 wherein said first segment and said second segment are non-adjacent.

21. A process as in claim 19 comprising in addition:

- c. said supplemental information is associated only with said second, distinct, subsequent segment; and,
- d. the step of processing said supplemental information is performed between steps a. and b.

22. A process as in claim 20 comprising in addition:

- c. said supplemental information is associated only with said second, distinct, subsequent segment; and,
- d. the step of processing said supplemental information is performed between steps a. and b.

23. A device for presenting an enhanced information bearing signal, which information comprises at least in part standard program content and at least in part supplemental information, comprising:

- a. a system component to derive standard program content information from a standard portion of said information bearing signal;
- b. a system component to derive supplemental information from information encoded in portions of said enhanced information bearing signal unused for standard program content;
- c. a system component to store said supplemental information to create stored supplemental presentation information; and
- d. a system component to simultaneously present said standard program content information and said stored supplemental information, said supplemental information being derived at least in part from information encoded in at least one previous signal segment distinct from the signal segment containing the currently displayed standard program content information.

24. A product comprising the information bearing signal produced by the process of claim 1 and recorded onto a recording medium.

25. A product comprising the information bearing signal produced by the process of claim

2 and recorded onto a recording medium.

26. A product comprising the information bearing signal produced by the process of claim 3 and recorded onto a recording medium.

5

27. A product comprising the information bearing signal produced by the process of claim 4 and recorded onto a recording medium.

28. A product comprising the information bearing signal produced by the process of claim 5 and recorded onto a recording medium.

10

30. A product comprising the information bearing signal produced by the process of claim 6 and recorded onto a recording medium.

31. A product comprising the information bearing signal produced by the process of claim 1 and distributed via a signal distribution system.

32. A product comprising the information bearing signal produced by the process of claim 2 and distributed via a signal distribution system.

33. A product comprising the information bearing signal produced by the process of claim 3 and distributed via a signal distribution system.

34. A product comprising the information bearing signal produced by the process of claim 4 and distributed via a signal distribution system.

25

35. A product comprising the information bearing signal produced by the process of claim 5 and distributed via a signal distribution system.

36. A product comprising the information bearing signal produced by the process of claim 6 and distributed via a signal distribution system.

30

35